AMENDMENTS TO THE CLAIMS

1.   (Currently amended) An image data processor for a liquid-crystal display that generates image data determining voltages applied to a liquid crystal from gray-scale values of an input image made up of a series of frames, the image processor comprising:

an encoding unit for encoding an input image data of a present frame and outputting an encoded image data;

a first decoding unit for decoding the encoded image data and outputting a first decoded image data corresponding to the present frame;

a delay unit for delaying the encoded image data for an interval corresponding to one frame and outputting a delayed encoded image data;

a second decoding unit for decoding the delayed encoded image data and outputting a second decoded image data corresponding to a previous frame;

a compensation data generator for generating compensation data for adjusting the gray-scale values of the present frame according to the first decoded image data and the second decoded image data; and

a compensation unit for generating said image data according to the input image data and the compensation data.

2.   (Previously presented) The image data processor of claim 1, wherein

the compensation data cause the liquid crystal to reach transmissivity values corresponding to the gray-scale values of the input image within substantially one frame interval.

2   DRA/CJB/bad

3.   (Currently amended) The image data processor circuit of claim 1, wherein the

compensation data generator includes

a data conversion unit for reducing the number of bits of at least one of the first decoded

image data and the second decoded image data, and outputting third decoded image data

corresponding to the first decoded image data and fourth decoded image data corresponding to

the second decoded image data; and

a unit for generating the compensation data based on the third decoded image data and

the fourth decoded image data.

4.   (Previously presented) The image data processor of claim3, wherein the

compensation data generator further includes:

a unit for generating an interpolation coefficient from the third decoded image data and

the fourth decoded image data; and

a compensation data interpolation unit for calculating an interpolated image data and the

fourth decoded image data; and

a compensation data interpolation unit for calculating an interpolated value of the

compensation data using the interpolation coefficient.

5.   (Previously presented) The image data processor of claim 1, wherein the

compensation data generator includes:

an error decision unit for detecting differences between the first decoded image data and

the input image data; and

a limiting unit for limiting the compensation data according to the detected differences.

6.   (Previously presented) The image data processor of claim 1, wherein the

compensation data generator includes:

an error decision unit for detecting differences between the first decoded image data and

the input image data; and

a data conversion unit for adding the detected differences to at least one of the first

decoded image data and the second image data, and outputting fifth decoded image data

corresponding to the first decoded image data and sixth decoded image data corresponding to the

second image data; and

a unit for generating the compensation data according to the fifth decoded image data

and the sixth decoded image data.

7.   (Previously presented) The image processor of claim 1, further comprising a band-

limiting unit for attenuating a predetermined frequency component included in the input image

data,

wherein the encoding unit encodes the output the band-limiting unit.

8.   (Previously presented) The image processor of claim 1, further comprising a noise

rejection unit for attenuating a noise component included in the input image data,

wherein the encodeing unit encodes the outputting the output of the noise rejection unit.

DRA/CJB/bad

9. (Canceled)

10. (Previously presented) An image data processor for liquid-crystal display that generates image data determining voltages applied to a liquid crystal from gray-scale values of an input image made up a series of frames, the image data processor comprising:

a data conversion unit for reducing the number of bits of an input image data of a present frame, thereby generating a first converted image data corresponding to the present frame;

a delay unit for delaying the first converted image data for an interval corresponding to one frame and outoputting a second converted image data corresponding to a previous frame;

a compensation data generator for generating compensation data for adjusting the gray-scale values of the present frame according to the first converted image data and the second converted image data; and

a compensation unit for generating said image data according to the input image data and the compensation image data.

11. (Previously presented) The image processor of claim 10, wherein the compensation data couse the liquid crystal to reach transmissivity values corresponding to the gray-scale calues of the input image within substantially one frame interval.

12. (Previously presented) An image data processor for a liquid-crystal display that generates image data determininf voltages applied to a liquid crystal from gray-scale values of an input image made up of a series of frames, the image data processor comprising:

DRA/CJB/bad

an encoding unit for encodeing an input image data of a present frame and outputting a

first encoded image data;

a delay unit for delaying the first encoded image data for an interval corresponding to

one frame and outputting a second encoded image data;

a decoding unit for decoding the second incoded image data and outputting a decoded

image data corresponding to a previous frame;

a compensation data generator for generating compensation data for adjusting the gray-

scale values og the present frame according to the input image data and the decoded image data;

and

a compensation unit for generating said image data according to athe input image data

and the compensation data.

13.   (Previously presented) The image data processor of claim 12, wherein the

compensation data cause the liquid crystal to reach transmittivity values corresponding to the

gray-scale values of the input image within substantially one frame interval.

14.   (Previously presented) The image processor of claim 12, further comprising a

limiting unit for setting the value of the compensation data to zero when the first encoded image

data and the second encoded image data are substantially identical.

15.   (Canceled)

DRA/CJB/bad

16.   (Currently amended) An image data processor for a liquid-crystal display that

generates image data determining voltages applied to a liquid crystal from gray-scale values of

an input image made up of a series of frames, the image data processor comprising:

an encoding unit for encoding the image data of a frame to be displayed on a display unit

and outputting an encoded image data;

a first decoding unit for decoding the encoded image data and outputting a first decoded

image data corresponding to the frame;

a delay unit for delaying the encoded image for one frame interval and outputting a

delayed encoded image data;

a second decoding unit for decodeing the delayed encoded image data and outputting a

second decoded image data corresponding to a precious frame;

a compensation data generator for generating compensation data adjusting the ~~gray-scaly~~

gray-scale values of a next frame according to the first decoded image data and the second

decoded image data;

a compensation unit for generating the image data which determines the gray-scale

values of the next frame according to the compensation data and an input image data of the next

frame.

17.   (Previously presented) The image data processor of claim 16, wherein the

compensation data cause the liquid crystal to reach transmissivity values corresponding to the

gray-scale value of the input image within substantially one frame interval.

DRA/CJB/bad

18.   (Previously presented) A method of image data processing for generating image

data determining voltages applied to a liquid crystal from gray-scale values of an input image

data made up of a series of frames, the method comprising:

encoding an input image data of a present frame and outoputting an encoded image data;

decoding the encoded image data and outputting a first decoded image data

corresponding to the present frame;

delaying the encoded image for an interval corresponding to one frame and outputting a

delayed encoded image data;

decoding the delayed encoded image data and outputting a second decoded image data

corresponding to a previous frame;

generating compensation data for adjusting the gray-scale values of the present frame

according to the first decoded image and the second decoded image; and

generating said image data according to the input image data and the compensation data.

19.   (Previously presented) The method of claim18, wherein the compensation data is

generated by:

reducing the number of bits of at least one of the first decoded image data and the

second decoded image data to generate third decoded image data corresponding to the first image

data and fourth decoded image data corresponding to the second decoded image data: and

generating the compensation data based on the third decoded image data and the fourth

decoded image data.

DRA/CJB/bad

20. (Previously presented) The method of claim 19, wherein the compensation data is

generated by:

generating an interpolation coefficient from the third decoded image data and the fourth

decoded image data; and

calculating an interpolated value of the compensation data using the interpolation

coefficient.

21. (Previously presented) The method of claim 18, wherein the compensation data is

generated:

detecting differences between the first decoded image data and the input image data; and

limiting the compensation data according to the detected differences.

22. (Currently amended) The method of claim 18, wherein the compensation data is

generated by:

detecting differences between the first decoded image data and the input image data; and

adding the detected differences to at least one of the first decoded image data and the

second decoded image data, and outputting fifth decoded image data corresponding to the first

decoded image data and sixth decoded image data corresponding to the second decoded image

data: and

generating the compensation data according to the fifth decoded image data and the sixth

decoded image data.

DRA/CJB/bad

23.   (Currently amended) The method of claim ~~1~~ 18, further comprising attenuating a noise component included in the input image data,

wherein the input image data is encoded after attenuating the noise component.

24.   (Previously presented) A method of image data processing for generating image data determining voltages applied to a liquid crystal from gray-scale values of an input image made up of a series of frames, the method comprising:

reducing the number of bits of an input image data of a present frame, thereby generating a first converted image data corresponding to the present frame;

delaying the first converted image data for an interval corresponding to one frame and outputting a second converted image data corresponding to a previous frame;

generating compensation data for adjusting the gray-scale values of the present frame according to the first converted image data and the second converted image data: and

generating said image data according to the input image data and the compensation image data.

25.   (Previously presented) A method of image data processing for generating image data determining voltages applied to a liquid crystal from gray-scale values of an input image made up of a series of frames, the method comprising:

encoding an input image data of a present frame and out putting a first encoded image data;

DRA/CJB/bad

delaying the first encoded image data for an interval corresponding to one frame and

outputting a second encoded image data;

decoding the second encoded image data and outputting a decoded image data

corresponding to a previous frame;

generating compensation data for adjusting the gray-scale values of the present frame

according to the input image data and the decoded image data; and

generating said image data according to the input image data and the compensation data.

26.   (Previously presented) The method of claim 25, wherein the value of the

compensation data is set to zero when the first encoded image data and the second encoded

image data are substantially identical.

27.   (Currently amended) A method of image data processing for generating image data

determining voltages applied to a liquid crystal from gray-scale values of an input image made

up of a series of frames, the method comprising:

encoding the image data of a frame to be displayed on a display unit and outputting an

encoded image data;

decoding the encoded image data and outputting a first decoded image data

corresponding to the frame;

delaying the encoded image for one frame interval and outputting a delayed encoded

image data;

decoding the delayed encoded image data and outputting a second decoded image data

corresponding to a previous frame;

generating compensation data for adjusting the ~~gray-sealy~~ gray-scale values of a next

according to the first decoded image data and the second decoded image data;

generating the image data which determines the gray-scale values of the next frame

according to the compensation data and an input image data of the next frame.

28.   (Currently amended) An image data processor for adjusting transmissivity values of

liquid crystal comprising:

an encoding unit for encoding an input image data of a present frame and outputting an

encoded image data;

a first decoding unit for decoding the encoded image data and outputting a first decoded

image data corresponding to the present frame;

a delay unit for delaying the encoded image data for an interval corresponding to one

frame and outputting a delayed encoded image data;

a second decoding unit for decoding the delayed encoded image data and outputting a

second decoded image data corresponding to a previous frame; and

a processing unit for processing the input image data using the first decoded image data

and the second decoded image data[[.]].

wherein the image data processed by the processing unit includes data that changes a

transmissivity corresponding to the previous frame to a transimissivity corresponding to the

present frame within substantially one frame interval.

29.   (Currently amended) A method of image data processing for adjusting

transmissivity values of liquid crystal comprising:

encoding an input image data of a present frame and outputting an encoded image data;

decoding the encoded image data and outputting a first decoded image data

corresponding to the present frame;

delaying the encoded image data for an interval corresponding to one frame and

outputting a delayed encoded image data;

decoding the delayed encoded image data and outputting a second decoded image data

corresponding to a previous frame;

processing the input image data using the first decoded image and the second decoded

image data[[.]],

wherein the image data processed using the first decoded image and the second decoded

image data includes data that changes a transmissivity corresponding to the previous frame to a

transimissivity corresponding to the present frame within substantially one frame interval.

30.   (Currently amended) An image data processor for adjusting transmissivity values of

liquid crystal comprising:

an encoding unit for encoding an input image data of a present frame and outputting an

encoded image data;

a delay unit for delaying the encoded image data for an interval corresponding to one

frame and outputting a second encoded image data;

DRA/CJB/bad

~~a decoding unit for decoding the encoded image data and outputting a decoded image~~

~~data corresponding to a previous ;~~ and

a processing unit for processing the input image data using the encoded image data.

wherein the image data processed by the processing unit includes data that changes a

transmissivity corresponding to the frame prior to the present frame to a transimissivity

corresponding to the present frame within substantially one frame interval.

31.   (Currently amended) A method of image data processing for adjusting

transmissivity values of liquid crystal comprising:

encoding an input image data of a present frame and outputting an encoded image data;

~~delaying the encoded image data for an interval corresponding to one frame and~~

~~outputting a second encoded image data;~~

~~decoding the encoded image data and outputting a decoded image data corresponding to~~

~~a previous;~~ and

processing the input image data using the encoded image data.

wherein the image data processed using the encoded image data includes data that

changes a transmissivity corresponding to a frame prior to the present frame to a transimissivity

corresponding to the present frame within substantially one frame interval.

32.   (Previously presented) A liquid crystal-display device provided with an image data

processor of claim 1.

33. (Previously presented) A liquid crystal-display device provided with an image data processor of claim 10.

34. (Previously presented) A liquid crystal-display device provided with an image data processor of claim 12.

35. (Previously presented) A liquid crystal-display device provided with an image data processor of claim 16.

36. (Previously presented) A liquid crystal-display device provided with an image data processor of claim 28.

37. (Previously presented) A liquid crystal-display device provided with an image data processor of claim 30.

38. (New) The image data processor of claim 30 comprising a delay unit for delaying the encoded image data for an interval corresponding to one frame and outputting a second encoded image data, and

a decoding unit for decoding the encoded image data and outputting a decoded image data corresponding to a previous frame,

wherein the processing unit processes the input image data using the encoded data and the decoded image data.

DRA/CJB/bad

39.   (New) The method of claim 31 comprising delaying the encoded image data for an

interval corresponding to one frame and outputting a second encoded image data,

decoding the encoded image data and outputting a decoded image data corresponding to

a previous frame,

wherein the input image data is processed using the encoded data and the

decoded image data.

DRA/CJB/bad